



DEPARTMENT OF OIL
TECHNOLOGY
HARCOURT BUTLER TECHNICAL
UNIVERSITY, KANPUR

100 YEARS
1921 - 2021
Centenary Year



DEPARTMENTAL

ACTIVITIES

OIL TECHNOLOGY

DEPARTMENT

CONTENTS

TABLE OF

1. About the University
2. 100 Glorious Years
3. Message From Vice Chancellor
4. About Oil Technology Department
5. A Word From Head Of Department
6. Our Mentors
7. Academic Curriculum - OIL TECHNOLOGY
8. Academic Focus
9. Core Subjects of Oil Technology
10. Allied Subjects and Laboratories
11. Oil Technology Departmental Facilities
12. Pilot Plants
13. Professional Grooming
14. Leaders From Department
15. Extra Curricular Activates
16. Departmental Activates
17. Our Recruiters

ABOUT THE UNIVERSITY



Harcourt Butler Technical University (HBTU), Kanpur (formerly known as Harcourt Butler Technological Institute (HBTI), Kanpur has always been a paragon and a source of inspiration in the field of science and technology, since 1921 and is one of the oldest and finest institutes in India. It has consistently been amongst the top 25 engineering colleges of the nation.

VISION

To achieve excellence in technical education, research and innovation

MISSION

1. Imparting knowledge to develop analytical ability in science and technology to serve the industry and society at large.
2. Equip and enable students with conceptual, technical and managerial skills to transform the organization and society.
3. Inculcating entrepreneurial philosophy and innovative thinking to promote research, consultancy and institutional social responsibility.
4. Serving people, society and nation with utmost professionalism, values and ethics to make development sustainable and quality of life.

100 GLORIOUS YEARS



The year 2021 announces the historic 100 years of HBTU, Kanpur. Its roots are as deep as its outlook. "Government Research Institute, Cawnpore" was established in 1920, which was renamed as "Government Technological Institute" in 1921. Finally in 1926 it got the name by which we know it today "Harcourt Butler Technological Institute". 2016 marks the year when HBTI, Kanpur was granted University status and is known as HBTU, Kanpur now.

The Centenary Celebration witnessed the presence of then Hon'ble President of India Shri Ramnath Kovind, Hon'ble Governor of U.P. Smt. Anandiben Patel (Chancellor, HBTU), then Minister of Technical Education Mun Prasad then Minister of Industrial Development Mr. Satish Mahana and numerous notable Alumni. The President released the special cover of the postage stamp of HBTU, Kanpur issued by the YEARS Department of Posts. Simultaneously, the commemorative buildings including the newly constructed Shatabd Pillar, were inaugurated pressing the button of the rep unveiled and eight Gate, Shatabdi Capsule which included achievements of HBTU, Kanpur from past 100 years was engraved in Shatabdi Stambh. Students of HBTU, Kanpur have proven their Technical Skills and Talent in In the past 100 years each and every Industrial Sector and are determinant to maintain their legacy.

A WORD FROM VICE CHANCELLOR

HBTU, Kanpur is a place for high quality teaching, research, collaboration and development of marketable products and I consider it to be my privilege to be a part of HBTU, Kanpur family. The University has a rich Alumni base with most of them established as entrepreneurs or serving the corporate world at very senior positions.

I congratulate the Department of Oil Technology for producing good technocrats to take up the challenges of corporate world. The curriculum designed by the Department is very dynamic and is tuned to meet the current and future requirement of the industry in the domain area in particular and society in general.

Oil Technology Department HBTU, Kanpur has established good linkage and signed MoUs with reputed organizations for motivating students, exchange of faculty and students and other collaborative / research work.

The department as well as the entire University has structured connect with Alumni for mentorship of the existing students and also to support the development of the university. Our Alumni are brand ambassadors working in different part of the globe.

Prof. Samsheer has taken over the charge of the Office of the Vice Chancellor, Harcourt Butler Technical University, Kanpur on 20th April, 2021.

I invite the recruiting organizations and graduating students to find the best match between their needs and capabilities.

I assure the recruiters on behalf of HBTU, Kanpur that our students will always try to exceed their expectations.



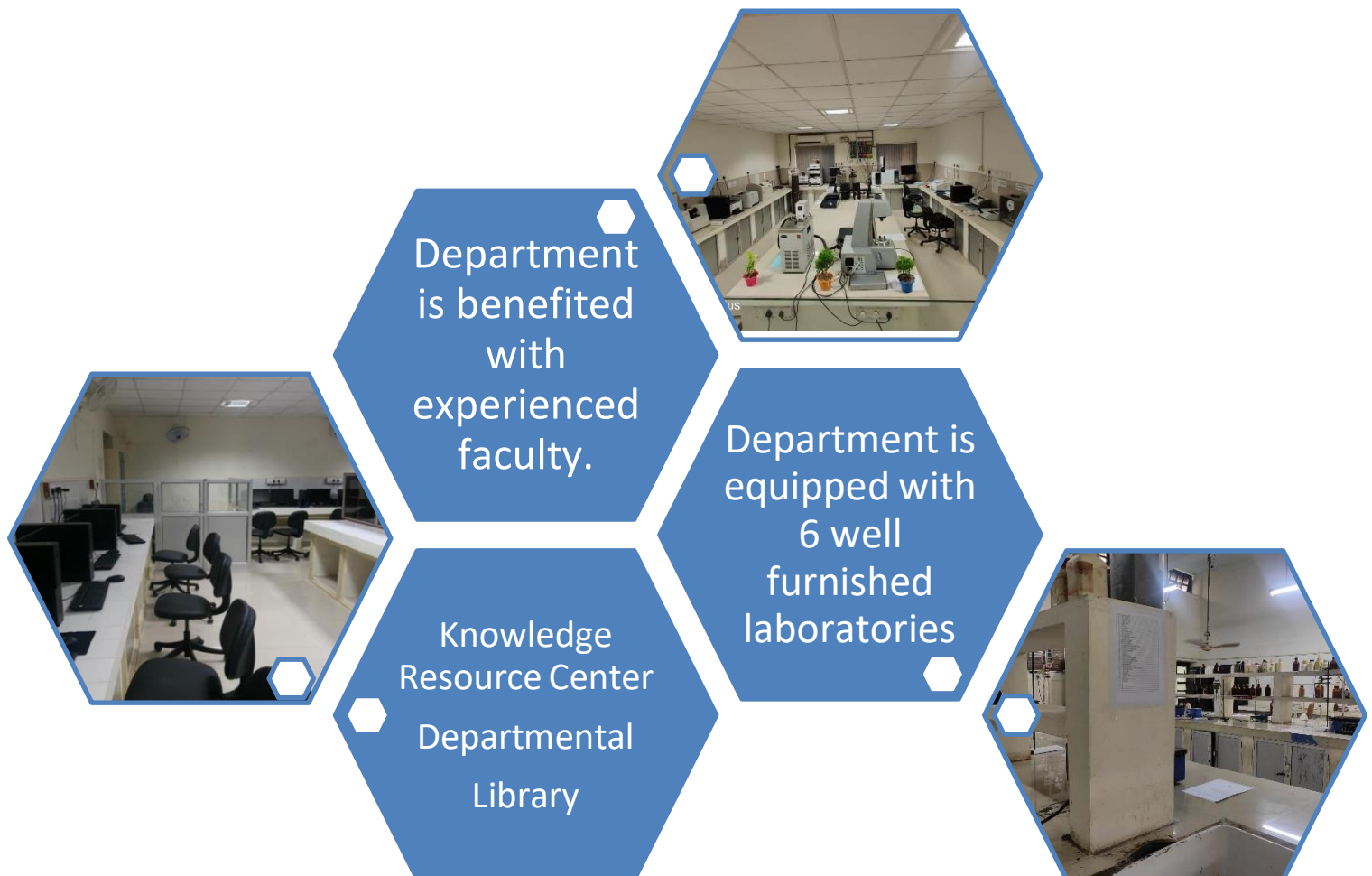
ABOUT OIL TECHNOLOGY DEPARTMENT

MISSION

Provide quality education through innovation in teaching and learning practices meeting the global standards. Encourage faculty and students to carry out innovative, socially relevant and eco-efficient research

VISION

Transforming the individuals into globally competent Chemical Technologists'-Oil Technologists' to fulfill technological needs of industry and society.



A WORD FROM

HEAD OF DEPARTMENT

Dear Recruiters,

From a tremendous beginning in 1921, and after the upgradation into university in 2016, Harcourt Butler Technical University, Kanpur has grown into an organization par excellence. The guiding philosophy of the University has been the creation of awareness among students so that they can face the challenges globally. The objectives of imparting education, combined with creation are being met in an integrated form to create a synergetic impact.



Dr. Praveen K. S. Yadav
Head of the Department

I feel privileged to briefly introduce the Department of Oil Technology. The department is the oldest department of HBTU (Formerly HBTI) Kanpur, established in 1921 and offers B. Tech., M. Tech. and Ph.D programmes. The B. Tech. Programme of the department has been accredited by NBA. Since its inception in 1921, the Department has made great strides in the past. The department has a legacy of highly qualified faculty having Ph.D. degree with a good number of research publications in National and International journals of high repute. Our faculty with updated experience in the relevant research area is crucial to the generation of an environment wherein our students not only learn theoretical concepts but also get a glimpse of what is happening on the industrial front. The vast pool of visiting faculty and guest lecturers ranging from academicians as well as industry personnel keeps the students well informed and updated. The Department has Advanced Surfactant Laboratory containing various sophisticated equipments apart from three pilot plants for Production of Bio-Diesel, Refining of Oils and Production of Soaps .

We strongly believe that our team of high caliber students who have been groomed by distinguished faculty and exposed to relevant industrial interactions are well equipped to become responsible and successful technologists. These students with their glorious academic pasts and multitalented personalities possess the potential to bring value to the industry. I take this opportunity to welcome you at HBTU Kanpur and invite you to this mutually beneficial journey.

With best wishes,

~Dr. Praveen K. S. Yadav

OUR MENTORS



Dr. Praveen K. S. Yadav

Associate Professor & Head of the Department.

Publications: 25

Research Interests: Renewable Energy, Oleochemicals Refining of Oils



Prof. R. K. Trivedi

Professor

Research Interests: Oleochemicals, ETP, Specialty Surfactants, Surface coating, polymers, Pigments, Green Chem.



Prof. V. K. Tyagi

Professor

Publications: 53 ; Awards and Scholarship: 3

Research Interests: Novel Surfactants and Oleochemicals, Changes during deep - fat frying of foods.



Dr. Vineeta Gautam

Assistant Professor

Publications: 8

Research Interests: Study on Poly aniline based composites for biosensors, Heat Transfer Operations, Nanomaterials



Mr. Gaurav Singh

Assistant Professor

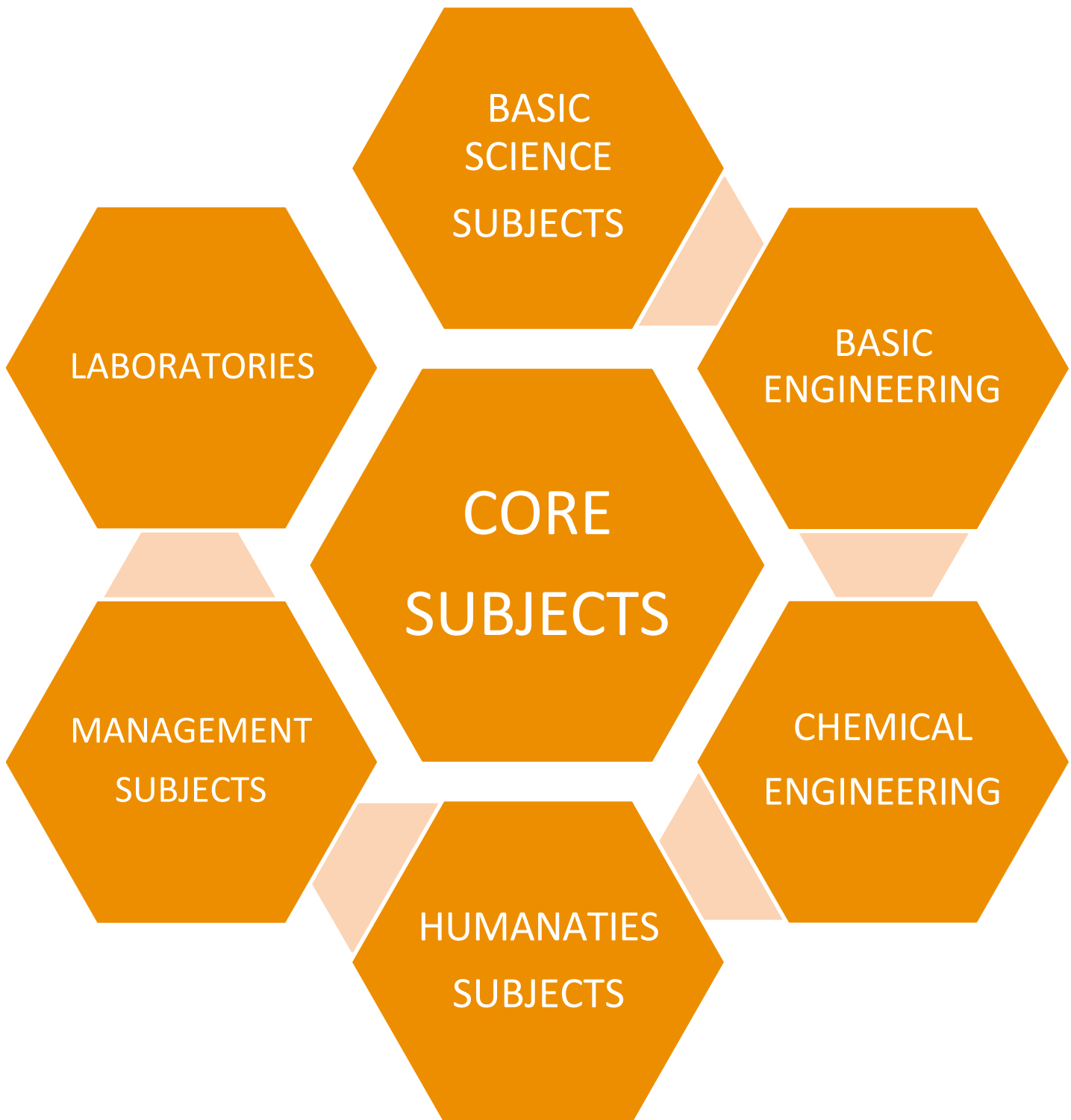
Publications: 6

Research Interests: Oleochemicals, Essential Oils, Edible Oil Extraction & Refining, Nutraceuticals.

ACADEMIC CURRICULUM

OIL TECHNOLOGY

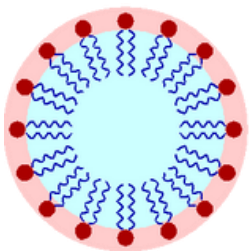
DEPARTMENT



ACADEMIC FOCUS

- **VEGETABLE OIL PROCESSING**
EXTRACTION AND REFINING
- **OLEO CHEMICALS**
- **ESSENTIAL OILS**
- **SURFACE COATING**
- **SOAPS AND SURFACTANTS**
- **BIO FUELS AND LUBRICANTS**
- **COSMETICS**
- **PETROCHEMICALS**
- **BIO-TECHNOLOGY**

AREAS OF RESEARCH



BIOSURFACTANTS



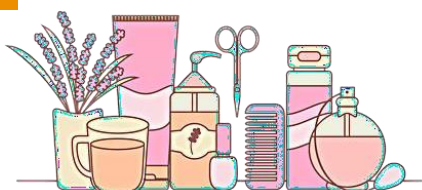
FUNCTIONAL FOODS



BIOFUELS



COSMETICS



PERSONAL CARE



PERFUMERY



BIO-LUBRICANTS



NUTRACEUTICALS

CORE SUBJECTS

VEGETABLE OIL

- Chemistry of Oils & Allied Products
- Sources Composition & Characterization of Oils, Fats & Waxes
- Expression & Extraction of Oil Bearing Materials
- Refining of Oils
- Quality Assurance of Oils & Allied Products
- Advanced Oil Chemistry & Oleochemicals
- Hydrogenation and Modification of Oils & Fats
- Biotechnology of Oilseeds & Oils

OLEOCHEMICALS

- Technology of Soaps & Fat-Splitting
- Technology of Surfactants & Synthetic Detergents
- Specialty Surfactants
- Fuel and Green Lubricants
- Lipid Biotechnology

OTHER SUBJECTS

- Essential Oils and Cosmetics
- Environmental Aspects of Oil and Allied Industry
- Petroleum products and Petrochemicals
- Process Economics & Plant Safety
- Computer Aided Equipment Design
- Packaging of Oils and Allied Products

ALLIED SUBJECTS

- Fluid Mechanics & Solid Handling
- Material & Energy Balances
- Chemical Engineering Thermodynamics
- Heat Transfer Operation
- Mass Transfer Operation
- Instrumentation & Process Control
- Chemical Reaction Engineering
- Transport Phenomena
- Machine design
- Equipment design
- Process Modelling and Simulation

LABORATORIES

- Oil Characterization Lab
- Oil & Oilseed Analysis Lab
- Analysis of Soap Products Lab
- Oils and Allied Products Formulation Lab
- Detergent Products Preparation & Analysis lab
- Oil processing Lab - Degumming,
Neutralization & Bleaching.
(Testing of Bleaching Earth & Activated Carbon,
By – Product Analysis.)

DEPARTMENTAL

FACILITES

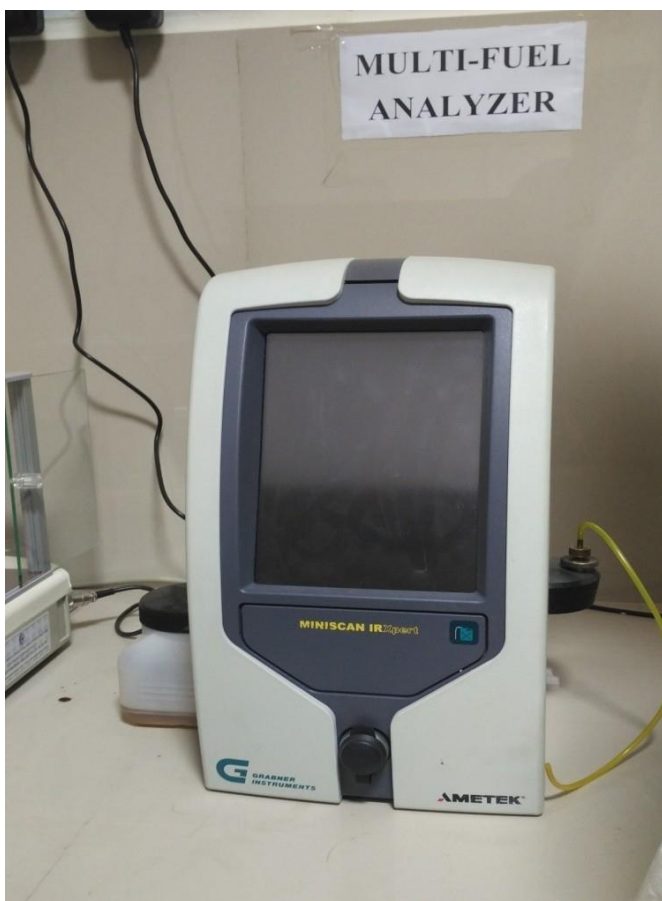
Advanced Surfactant Laboratory



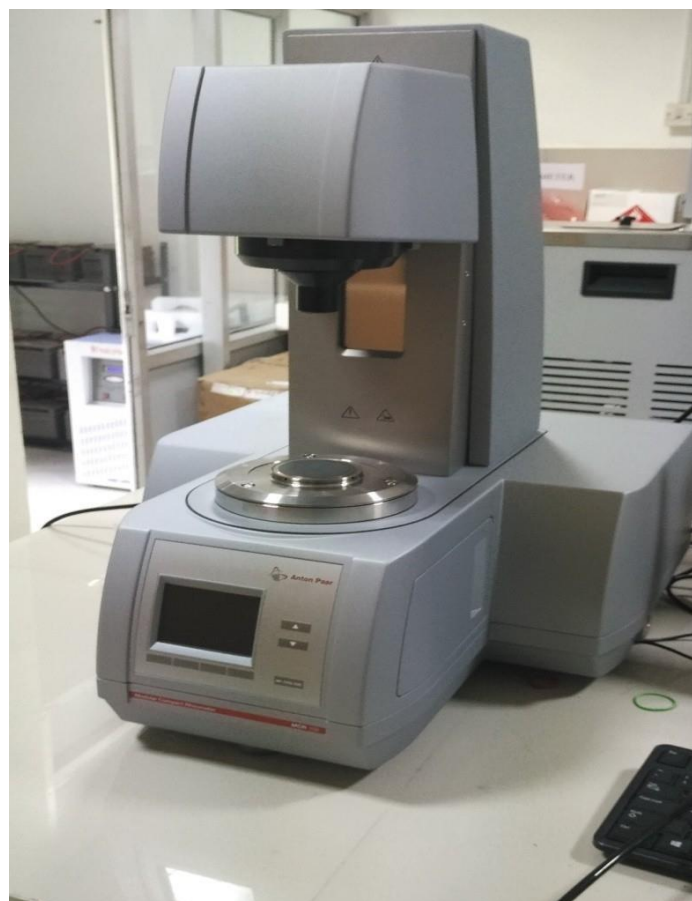
FTIR



BOMB CALORIMETER



MULTI-FUEL ANALYZER



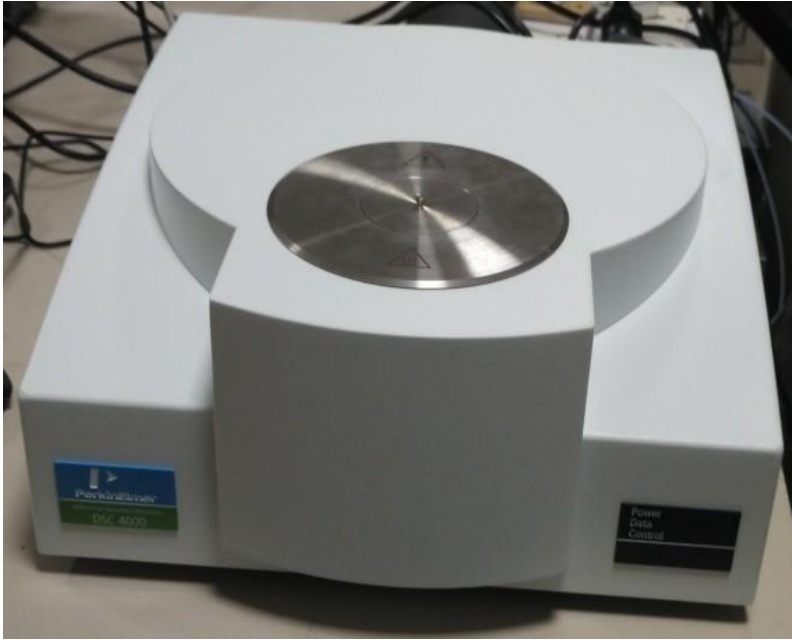
RHEOMETER



SAFTTEST ANALYZER



GAS CHROMATOGRAPHY



DIFFERENTIAL SCANNING CALORIMETER



SURFACE TENSIO METER



HYBRID SFC - HPLC

PILOT PLANTS IN DEPARTMENT

The department have its own pilot plants for Bio – Diesel production, Refining of Oils & Soap Manufacturing.



KNOWLEDGE

RESOURCE CENTRE

Knowledge Resource Center has been established in the Department under Center of Excellence in which desktop computers equipped with different software's viz. MATLAB, Design Expert, STATISTICA and Origin Pro for strengthening R&D activities have been set up. Various books in hard and soft copies are present on thematic area of center.



PROFESSIONAL GROOMING



INDUSTRIAL TRAINING

Students are provided 6 Weeks industrial Summer training in various companies of repute .



EDUCATIONAL TOUR

Students visit the industries regularly to understand the practical aspects of the theory subjects & enhance their learning in the subjects .



SEMINARS

Seminars are being delivered by the students in front of veterans and batch-mates that enhances students' professional interactions



EXPERT LECTURES

Department regularly organizes expert talks with the renowned industrial people at senior post to enlighten students about latest trends in the industries

LEADERS FROM DEPARTMENT

S.No.	Name	Company	Designation
1	Prof. R.P. Singh	HBTI, Kanpur	Ex Director HBTI, Kanpur
2	Mr. Dinesh Shahra	Ruchi Industries Ltd	Managing Director
3	Mr. K.C. Rajput	Emami Agro Tech Ltd	Vice President
4	Mr. R.K. Singh	Adani Wilmar Ltd	Vice President
5	Mr. Sharad Sharma	Adani Wilmar Ltd	Associate Vice President
6	Mr. Prabhat Gupta	Archer Daniel Midland	India Operations Manager
7	Mr. Vineet Gupta	R.S.P.L	Vice President
8	Mr. Manish Shukla	COFCO International	Plant Head
9	Mr. Arvind Saxena	JVL Agro Ltd	Vice President
10	Mr. Sunil Singh	IFFCO Group	Technical Director
11	Mr. Sanjay Tandon	Free Lancer	Free Lance Consultant
12	Mr. Hakim Singh	B.L. Agro Industries Ltd.	Plant Head
13	Mr. Debakanta Dash	Archer Daniel Midland	Head Technical, ADM Agro , Dharwad
14	Mr. Rajesh Khare	Archer Daniel Midland	Senior GM Technical
15	Mr. Manish Bajpai	Adani Wilmar Ltd	Cluster Head
16	Mr. Manoj Srivastava	Adani Wilmar Ltd	Unit Head Adani Wilmar Calcutta
17	Dr. Prachi Srivastava	B.L.Agro	Director
18	Mr. Sunil Lodhi	Adani Wilmar Ltd	Plant Head Adani Mangalore
19	Mr. Sushil Singh	Bunge	General Manager Bunge Kachchh
20	Mr. Birendra Kumar Paliwal	Emami Agro Tech Ltd	Quality Control Head
21	Mr. Surajit Ganguly	Emami Agro Tech Ltd	Production Manager- Retired
22	Mr. R.K. Verma	Emami Agro Tech Ltd	GM - Emami Krishnapatnam
23	Mr. Omvir Singh	RSPL Ltd.	Plant Head
24	Mr. Hardev Singh	R.M.C. Group Pvt. Ltd.	President

LEADERS FROM DEPARTMENT

S.No.	Name	Company	Designation
25	Mr. U. C. Bajpai	IFFCO Group	General Manager
26	Mr. Sanjay Srivastava	Agro Tech Foods Ltd	Head - Manufacturing
27	Mr. Chetan Mishra	Hindustan Unilever Ltd.	Assistant Manager
28	Mr. Robin Rajvardhan	GSK	Senior Procurement Manager
29	Mr. Chandrika Ram	Gokul Agro. Resource Ltd.	Refinery Manager
30	Mr. Amit Bhatt	Louis Dreyfus	Plant Manager
31	Mr. Hrishikesh Khare	Tasco Industries Uganda	General Manager
32	Mr. Inderjeet Singh	Procter & Gamble	Consumer Insight & Analytics Leader
33	Mr. Sudeep Chakravarty	Procter & Gamble	Senior Scientist/Engineer
34	Mr. Sarvesh Dubey	Merino Industries Ltd.	Head(Plant and Western Hub)
35	Mr. Sarvesh Tiwari	Ruchi Soya	Senior Manager Production and Planning
36	Mr. Devendra Somvanshi	Qatar Food Industries	Plant Manager
37	Mr. Vivek Mahajan	Sheel Oil and Fats	Director of Operations
38	Mr. Amit Shukla	VVF Group	Head Global R&D
39	Mr. Rajkumar Pamnani	Arise IIP	Factory Manager
40	Mr. Udayan Upreti	Cargill	Solution Integrity Analyst
41	Mr. Yashovardhan Sinha	Cargill	Senior Manager
42	Mr. Himanshu Pandey	Gulf Oil Lubricants India Ltd.	Head of Sourcing
43	Mr. Kamal Verma	ITC Ltd.	Assistant Manager
44	Mr. Sadanand Patel	MIL India Ltd.	Assistant Manager
45	Ms. Sapna Tyagi	Sunshine India INC	Application Technologist
46	Mr. Ajay Kumar	Adani Wilmar	Senior Engineer
47	Mr. Devendra Kumar Singh	Gemini Edibles and Fats India Pvt. Ltd.	Production Executive

EXTRA CURRICULAR ACTIVITIES



DEPARTMENTAL ACTIVITIES

- National seminars
- International Conferences
- Expert Lectures and Alumni Interaction
- Management Lectures

Meet with Mr. Dinesh Shahra



Seminar



Teacher's Day



Industrial Training



Interaction



OTAI Conference



Presentation



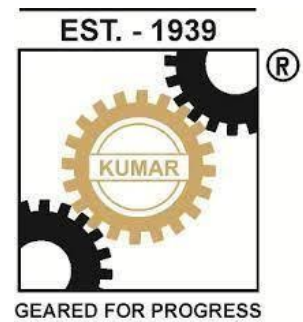
OUR STUDENTS ARE ADDING VALUE TO



中糧
COFCO
自然之源 重塑你我



OUR STUDENTS ARE ADDING VALUE TO



AND MANY MORE...